AMENDMENTS TO THE CLAIMS:

The following is a complete list of the pending claims.

1.   (Currently amended)   A method for reducing the incorporation of non-standard amino acids into a heterologous protein expressed by ~~microorganisms~~ a microorganism comprising:
co-expressing in the microorganism ~~at least one~~ a heterologous protein and ~~at least one~~ a non-standard amino acid degrading protein.

2.   (Currently amended)   The method of claim 1 wherein the non-standard amino acid degrading protein is a glutamate dehydrogenase~~, leucine dehydrogenase, a valine dehydrogenase, a glutamate/leucine/phenylalanine/valine dehydrogenase, a phenylalanine dehydrogenase, or an opine dehydrogenase~~.

3.   (Currently amended)   The method of claim 2 wherein the non-standard amino acid degrading protein is a wild-type or K92L variant glutamate dehydrogenase from *Escherichia coli*~~, a leucine dehydrogenase from Bacillus cereus, a leucine dehydrogenase from Bacillus subtilis, a leucine dehydrogenase from Nostoc sp. a leucine dehydrogenase from Shewanella oneidensis, a valine dehydrogenase from Streptomyces avermitilis, or a glutamate/leucine/phenylalanine/valine dehydrogenase from Nitrosomonas europaea~~.

4.   (Currently amended)   The method of claim 3 wherein the non-standard amino acid degrading protein has a sequence selected from SEQ ID NO:2[[,]] or ~~4, 6, 8, 10, 12, 14, or 16~~.

5.   (Currently amended)   The method of claim 4 wherein the non-standard amino acid degrading protein is encoded by a DNA molecule having a sequence selected from SEQ ID NO:1[[,]] or 3~~, 5, 7, 9, 11, 13, or 15~~.

6-7.   (Cancelled)

8.   (Original) The method of claim 1 wherein the microorganism is *Escherichia coli*.

9.   (Currently amended)   The method of claim 1 wherein ~~at least one of~~ the expressed heterologous ~~protein(s)~~ protein is a somatotropin.

10.   (Currently amended) The method of claim 9 wherein the somatotropin is selected from the group consisting of human, equine, bovine, ovine, porcine, canine, [[or]] and feline somatotropin.

11.   (Original) The method of claim 9 wherein the somatotropin is bovine somatotropin.

12.   (Original) The method of claim 1 wherein the microorganism is *Escherichia coli (E. coli)*; wherein the non-standard amino acid degrading protein is *E. coli* glutamate dehydrogenase or a lysine 92 leucine variant of *E. coli* glutamate dehydrogenase; and wherein the heterologous protein is bovine somatotropin.

13.   (Withdrawn) The method of claim 1 wherein the non-standard amino acid degrading protein is a leucine dehydrogenase from *Bacillus cereus*, a leucine dehydrogenase from *Bacillus subtilis*, a leucine dehydrogenase from *Nostoc sp.*, a leucine dehydrogenase from *Shewanella oneidensis*, a valine dehydrogenase from *Streptomyces avermitilis*, or a glutamate/leucine/phenylalanine/valine dehydrogenase from *Nitrosomonas europaea*; and wherein the heterologous protein is bovine somatotropin.

14.   (Original) The method of claim 1 wherein the heterologous protein and the non-standard amino acid degrading protein are expressed from a single expression vector.

15.   (Original) The method of claim 1 wherein the heterologous protein and the non-standard amino acid degrading protein are expressed from at least two distinct expression vectors.

16.   (Original) The method of claim 1 wherein the non-standard amino acid is norleucine.

17.   (Currently amended)   The method of claim 1 wherein the non-standard amino acid degrading protein is ~~selected from the group consisting of:~~ a glutamate dehydrogenase, ~~a phenylalanine dehydrogenase, a valine dehydrogenase, a leucine dehydrogenase, a glutamate/leucine/phenylalanine/valine dehydrogenase and an opine dehydrogenase;~~ and wherein the non-standard amino acid is selected from the group comprising: norleucine, norvaline, beta-methylnorleucine, and homoisoleucine.

18.   (Original) The method of claim 17 wherein the non-standard amino acid is norleucine or norvaline.

19-26. (Cancelled)

27.   (Currently amended) A method of isolating a protein from a microorganism comprising:
        a) co-expressing in a microorganism ~~at least one~~ a heterologous protein and ~~at least one~~ a non-standard amino acid degrading protein; and
        b) isolating the heterologous protein from the microorganism.

28.   (Currently amended) A method of isolating a protein comprising:
        isolating at least one heterologous protein from a microorganism; wherein said microorganism co-expresses ~~at least one~~ a heterologous protein and ~~at least one~~ a non-standard amino acid degrading protein.

29.   (Currently amended) The method of either claim 27 or claim 28 wherein the non-standard amino acid degrading protein is ~~selected from the group consisting of~~ a glutamate dehydrogenase, ~~a phenylalanine dehydrogenase, a leucine dehydrogenase, a valine dehydrogenase, a glutamate/leucine/phenylalanine/valine dehydrogenase, and an opine dehydrogenase~~.

30. (Original) The method of claim 29 wherein the non-standard amino acid is norleucine.

31. (Cancelled)

32. (Currently amended) The method of claim [[31]] 29 wherein the non-standard amino acid degrading ~~enzyme~~ protein is a wild-type or K92L variant glutamate dehydrogenase from *Escherichia coli*, ~~a leucine dehydrogenase from *Bacillus cereus*, a leucine dehydrogenase from *Bacillus subtilis*, a leucine dehydrogenase from *Nostoc sp.* a leucine dehydrogenase from *Shewanella oneidensis*, a valine dehydrogenase from *Streptomyces avermitilis*, or a glutamate/leucine/phenylalanine/valine dehydrogenase from *Nitrosomonas europaea*.~~

33. (Cancelled)

34. (Withdrawn – Currently amended) The method of claim [[31]] 27 wherein the non-standard amino acid degrading ~~enzyme~~ protein is a leucine dehydrogenase from *Bacillus cereus*, a leucine dehydrogenase from *Bacillus subtilis,* a leucine dehydrogenase from *Nostoc sp.*, a leucine dehydrogenase from *Shewanella oneidensis*, a valine dehydrogenase from *Streptomyces avermitilis*, or a glutamate/leucine/phenylalanine/valine dehydrogenase from *Nitrosomonas europaea*.[[.]]

35. (Original) The method of either claim 27 or claim 28 wherein the microorganism is *Escherichia coli*.

36. (Currently amended) The method of claim 35 wherein the non-standard amino acid degrading ~~enzyme~~ protein is a glutamate dehydrogenase~~, a leucine dehydrogenase, a valine dehydrogenase, or a glutamate/leucine/phenylalanine/valine dehydrogenase~~.

37. (Currently amended) The method of either claim 27 or claim 28 wherein the microorganism is *Escherichia coli* (*E. coli*); and

wherein the non-standard amino acid degrading ~~enzyme~~ protein is a lysine 92 to leucine variant of *E. coli* glutamate dehydrogenase~~, a leucine dehydrogenase, a valine dehydrogenase, or glutamate/leucine/phenylalanine/valine dehydrogenase~~; and

wherein ~~at least one~~ the heterologous protein is a bovine somatotropin.

38.   (Currently amended) The method ~~either of claims~~ of either claim 27 or 28 wherein the non-standard amino acid degrading protein is ~~selected from the group consisting of:~~ a glutamate dehydrogenase, ~~a phenylalanine dehydrogenase, a valine dehydrogenase, a leucine dehydrogenase, and a glutamate/leucine/phenylalanine/valine dehydrogenase;~~ and wherein the non-standard amino acid is selected from the group comprising: norleucine, norvaline, beta-methylnorleucine, and homoisoleucine.

39.   (Original) The method of claim 38 wherein the non-standard amino acid is norleucine or norvaline.

40.   (Original) The method of either claim 27 or 28 wherein the non-standard amino acid degrading protein is capable of degrading norleucine.

41.   (Original) The method of either claim 27 or 28 wherein the percentage of heterologous protein containing norleucine is substantially zero.

42.   (Currently amended) The method of claim 1 wherein the heterologous protein and/or the ~~norleucine~~ non-standard amino acid degrading protein is expressed from a location in the microorganism's genome.

43.   (Withdrawn – New) The method of claim 1 wherein the non-standard amino acid degrading protein is a leucine dehydrogenase, a valine dehydrogenase, a glutamate/leucine/phenylalanine/valine dehydrogenase, a phenylalanine dehydrogenase, or an opine dehydrogenase.

44.   (Withdrawn – New)   The method of claim 43 wherein the non-standard amino acid degrading protein is a leucine dehydrogenase from *Bacillus cereus*, a leucine dehydrogenase from *Bacillus subtilis,* a leucine dehydrogenase from *Nostoc sp.,* a leucine dehydrogenase from *Shewanella oneidensis*, a valine dehydrogenase from *Streptomyces avermitilis*, or a glutamate/leucine/phenylalanine/valine dehydrogenase from *Nitrosomonas europaea.*

45.   (Withdrawn – New)   The method of claim 44 wherein the non-standard amino acid degrading protein has a sequence selected from SEQ ID NO:6, 8, 10, 12, 14, or 16.

46.   (Withdrawn – New)   The method of claim 45 wherein the non-standard amino acid degrading protein is encoded by a DNA molecule having a sequence selected from SEQ ID NO:5, 7, 9, 11, 13, or 15.

47.   (Withdrawn – New)   The method of claim 1 wherein the non-standard amino acid degrading protein is selected from the group consisting of: a phenylalanine dehydrogenase, a valine dehydrogenase, a leucine dehydrogenase, a glutamate/leucine/phenylalanine/valine dehydrogenase, and an opine dehydrogenase; and wherein the non-standard amino acid is selected from the group comprising: norleucine, norvaline, beta-methylnorleucine, and homoisoleucine.

48.   (Withdrawn – New)   The method of claim 47 wherein the non-standard amino acid is norleucine or norvaline.